Economic Research Center

# A STATEMENT OF CONCLUSIONS OF THE STUDY ON THE CONCEPT TO STRENGTHEN AND IMPROVE FINANCING OF PRIMARY HEALTH CARE (PHC) DELIVERY IN AZERBAIJAN

BAKU-2006

Since June 2005, **the Economic Research Center (ERC)**, with funding from **OGB**, has been conducting a research aimed at increasing the efficient use of healthcare expenditures financed out of the State Budget, and designing effective mechanisms for public financing of primary health care (PHC) systems. This study targets to improve the quality of PHC and to increase its public availability in accordance with objectives of the United Nations Millennium Development Goals (MDGs) and the State Program on Poverty Reduction and Economic Development (SPPRED). In this paper we have analyzed the current situation on financing and organization of healthcare services in our country, in particular related to PHC; accessed experiences on PHC financing and organization in certain countries (including developed, FSU, and developing); investigated reform-related practices in the CIS nations and related studies carried out by a variety of international organizations (WHO, UNDP, USAID, WB, etc) and commentators. In addition, the study has encompassed roundtables and consulting assignments with participation of local experts, interviews for public comments on availability and quality level of PHC delivery in the regions, including a set of similar activities.

As we are well aware, a variety of international development organizations, including but not limited to, the World Health Organization (WHO), **Oxfam-GB**, USAID, the United Nations Development Programme (UNDP), USAID, the International Medical Corpse (IMC), the World Bank (WB), etc, have recently elaborated and issued reports and guidelines after conducting a number of studies towards investigating the current situation and implementing structural reforms in the healthcare sector across Azerbaijan.

Also, over the recent years the above-mentioned institutions, and in particular, OGB and IMC have been implementing community-based pilot projects on PHC improvement in our country. In this concern, it is worth speaking of OGB-applied model "Support of community-based first medical care in Azerbaijan". This model has been a tremendous attention, as it integrates the entire principles on PHC management. Therefore, IRC has studied the very model, as part of the project, with a view to examining opportunities for its wide application and possibility. To this end, sociological surveys on the population's social conditions and PHC have been conducted among the inhabitants living in a village impacted by the project as well as in a second village to which the OGB model is not applied.

**The legal framework of health care.** The local legislation on public health consists of the Republic of Azerbaijan's Constitution, Azerbaijan's Law on public health, other legislative acts, as well as international agreements Azerbaijan has joined or ratified. The health, safety, and right to health protection of Azerbaijan citizens have been set out in the Constitution of Azerbaijan Republic.

The Republic of Azerbaijan's Constitution (Art. 41 Right to Health Protection) states: "Every person shall have the right to Health Protection and Medical Aid. The State acting on the basis of various forms of property shall implement necessary measures to promote the development of all aspects of health services, ensure the sanitary-epidemiological security, generate various forms of health insurance. Authoritative Persons shall be made answerable for concealing the facts and cases that create danger to life and health of people."

All disputes in the field of protection of public health between the citizens and government-linked entities, as well as between state-owned and private health institutions are regulated by Azerbaijan's Law on public health (June 26,1997). Under the Law, the main principles for the protection of public health are as follows:

- State protection of the rights of citizens in the field of public health and responsibility of legal and natural entities in this field;
- Implementation of preventive measures in the field of protection of public health;
- Accessibility to medical and social assistance by all citizens;
- Social protection of all disabled persons;

The government's duties on the protection of public health defined in Art. 3 of the Law are as following:

- Establishment of government policy priorities in public health, protection of the rights of citizens;
- Development and realization of state programs on public health protection;
- Establishment of rules for health system management and activity;
- Financing of the public health system;
- Warranting of environmental preservation and ecological safety;
- Establishment of a rule for payment of insurance sums and premiums;
- Warranting of medical and social assistance to vulnerable groups of the population;
- Protection of sound competition between state-owned and private health systems;
- Protection of family, including parents and children;
- Implementation of international collaboration in the field of health care system.

Rules for primary health care services are listed in Art. 32 of the Law by which primary medical and sanitary-hygienic aid is a type of free services. Its components are:

- Treatment of the widely widespread diseases, traumas, poisonings and also other diseases requiring first aid;
- Implementation of sanitary-hygienic and anti-epidemic measures, prophylaxis of illnesses that may present public threat;
- Protection of family, including parents and children and other measures for medical and hygienic aid at home.

The primary medical and hygienic aid is delivered by state-owned health institutions, as well as sanitary-hygienic centers. Private health system entities collaborate with insurance firms and provide primary medical and hygienic aid on the basis of agreements concluded with the sick.

The Law (Art. 33) also states that fast and urgent medical aid is provided to the citizens in cases demanding emergency medical intervention (accidents, trauma, poisonings and other diseases), medical establishments irrespective of patterns of ownership, and also persons obliged to render primary medical aid. In state medical establishments the fast and urgent medical aid appears free-of-charge.

The Law of the Azerbaijan Republic on **private medical activity** (adopted on December 30, 1999) regulates private health care institutions, establishes their rights and duties, as well as organizational and legal elements of such activity. According to Art. 6 of the said Law, private health system entities (both legal and natural health centers) collaborate with insurance firms and provide primary medical and hygienic aid on the basis of agreements concluded with the sick. The agreement shall reflect types, scope and conditions of primary medical and hygienic aid.

The Law of the Republic of Azerbaijan **on Prevention of Iodine Deficiency Disorders (December 2002)** establishes legal framework for salt iodization aimed at preventing iodine deficiency disorders and regulates all relations in this field. The law that aims to prevent massive iodine deficiency disorders is extended to all legal entities dealing with salt iodization.

The Law **"On combat with tuberculosis in the Azerbaijan Republic" (May 2, 2000)** establishes organizational and legal bases to prevent the people from tuberculosis, rights and duties of persons suffering from this disease.

In addition to the above-mentioned, a number of laws and normative acts (such as pharmaceutics, immune prophylactics of infectious diseases, prevention of diabetic diseases, medical social insurance,

etc.), regulating certain components of the health care system, as well as primary health care delivery, have been adopted.

**The ongoing status in the healthcare system.** The study showed that there is a large number of health institutions at all levels in the country: however their current level of efficiency, including types of services provided and quality have varied. In 2004 there were 732 hospitals (republican, city, regional, and village hospitals, specialized health centers, teaching hospitals and private healthcare institutions); 1,594 ambulance-polyclinic service organizations; 922 antenatal clinics, children polyclinics and ambulance stations in the county. These institutions employed over 30,000 physicians and around 60,000 paramedic providers. Their numbers per 10, 000 individuals accounted for 36.6 and 72.6 accordingly.

Over the same time period, the number of beds in Azerbaijan hospitals has been 68,400 (83.1 beds per 10,000 individuals); it is 1.5-2 times higher than any developed country average.

**Table 1.**

**Major Health Indicators in the Azerbaijan Republic for the Years 2001 to 2004**

| Description | 2000 | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|---|
| Number of physicians (in thousands) | 29 | 29.1 | 29.5 | 29.7 | 30.1 |
| Per 10,000 individuals | *35.5* | *36.3* | *36.5* | *36.4* | *36.6* |
| Paramedic staff, (in thousands) | 60.0 | 59.9 | 59.1 | 59.5 | 59.7 |
| Per 10,000 individuals | *75.4* | *74.6* | *73.1* | *73.1* | *72.6* |
| Number of general hospitals | 735 | 735 | 738 | 734 | 732 |
| Number of beds in hospitals (in thousands) | 69.9 | 69.0 | 68.7 | 68.1 | 68.4 |
| Per 10,000 individuals | *87.8* | *86.0* | *85.0* | *83.6* | *83.1* |
| Number of beds for sick children in hospitals (in thousands) | 11.9 | 11.5 | 11.4 | 11.7 | 11.7 |
| Number of beds for pregnant and in child-birth women (including medical and gynecological beds) (in thousands) | 7.5 | 7.3 | 7.4 | 7.4 | 7.4 |
| Number of antenatal clinics, children polyclinics and ambulances (included in the structure of independent and other organizations) | 913 | 917 | 917 | 916 | 922 |
| Number of ambulance-polyclinic service organizations | 1614 | 1618 | 1603 | 1591 | 1594 |
| Power of ambulance-polyclinic service organizations (number of attendance in a shift) (in thousands) | 105.6 | 105.0 | 105.9 | 105.0 | 105.3 |
| Per 10,000 individuals | *132.7* | *130.8* | *131.0* | *128.9* | *127.9* |
| The average health care provider's salary (in AZM ths) | 73.4 | 80.6 | 90.0 | 109.5 | 148.2 |

**Source: State Statistics Committee of Azerbaijan Republic. Environment and Health (2005).**

Although the number of beds per person in Azerbaijan is high, the level of use with them is much lower than the regional average. The point is that the bed use ratio in Azerbaijan lags behind three times from the indicator in the EU. Currently, the day a patient spends in the hospital in Azerbaijan exceeds that in any developed country by 2-3 times.

In 2004, some 174,600 persons were employed by the health sector. That means 4.6% of total workforce employed and 14.7% of government-salaried staff in the country.

In Azerbaijan, there is also a great deal of sanatoriums providing primary and auxiliary public health care services. In addition to the facilities subordinated to the Ministry of Health, there are clinics and in-patient facilities owned by the Railway Department, the Ministry of Defense, law-enforcement bodies, and the State Oil Company of the Azerbaijan Republic (SOCAR). These facilities are targeted to an insignificant section (5%) of the population. Besides, several NGOs provide health care services across the country. At present *MediClub*, the first private medical company in Azerbaijan operates 25 private hospitals and six government hospitals. These inpatient and outpatient subdivisions function based on daily service payment, annual transfers, and co-payments[1].

At first sight, the Ministry of Health has a dominant role in the health system management: since it, being the chief health care protector, is responsible for preparation and implementation of (public) health policy; elaboration of normative acts and regulations regulating the health sector, and provision to comply with laws and regulations in this sphere. Heads of large and regional hospitals, the entire health staff are appointed by this ministry; also the activity of healthcare institutions and the level of their services is checked and assessed by this ministry; healthcare institutions report to the ministry.

However, in administrative concern large central health facilities, research and education institutions, sanitary-hygienic services are subordinated to the ministry. Apart from the health facilities owned by the Railway Department, the Ministry of Defense, the Ministry of Security, the rest health insinuations are controlled by urban and regional executive structures. The ministry has been isolated from the adoption of last decisions on health expenditures, has no authority to do anything for planning of health system needs. Orders on health expenses are made by city and regional financial departments and executive structures.

**The ongoing status in health financing.** According to Article 9 of the Law of the Azerbaijan Republic on Protection of Health of the Population, financing state system of public health services is carried out basically for the account: Means of the state budget, and also obligatory medical insurance, voluntary deductions from the incomes of organizations, establishments and enterprises, donations of the legal and physical persons, and also other sources which are not contradicting to the legislation. Means of state system of public health services are directed on: Preparation and realization of a complex of the target programs on public health services; Development financially - technical base of the enterprises of state public health services; Contents medical - preventive and sanitary - epidemic establishments; Rendering of preferential medical aid: Preparation and improvement of professional skill of the medical and pharmaceutical workers; Development and introduction of a medical science; Liquidation of epidemics.

According to a WTO report, during 2002 health expenditure in the EU has been on average of $1,645 per capita, while this figure for the FSU countries is as follows: Russia -$150, Belarus- $93, Turkmenistan- $79, Kazakhstan -$56, Armenia- $45, Ukraine- $40, Moldova- $27, Georgia- $25, Uzbekistan - $21, Kyrgyzstan - $14, and Tajikistan- $6. This figure in Azerbaijan has accounted for $27 over the same period[2].

The study showed that although the amount of healthcare expenditures from the state budget had increased since 1995, the specific weight of these funds in overall budget costs has dropped since then: this level was 10% in 1995, whereas it was reduced to 5.5% in 2005. This figure accounts for 4.2% for this year. The share of budgeted healthcare costs in GDP has fallen from 1.4% in 1995 to 1%. For comparison: this figure in Belarus accounts for 4.9%, in Moldova and Turkmenistan 3.7%, in Ukraine

[1] Report on Azerbaijan's health sector. World Bank (2005).
[2] The World Health Report (2005).

3.5%, in Russia 3.4%, in Kazakhstan 2.4%, in Armenia 1.3%, in Tajikistan 1.0% and 0.55% in Georgia[3].

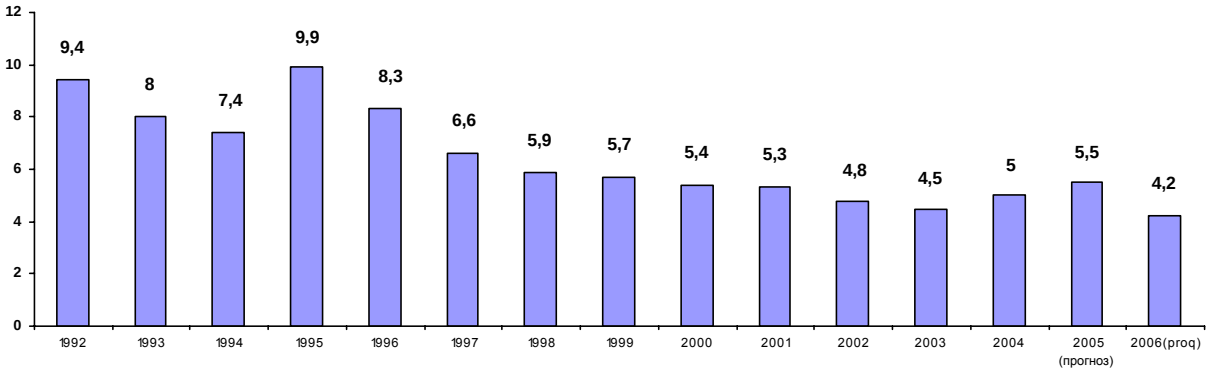


**Chart1. Unit weight of health care spending in the budget of expenditures (between 1992 and 2006)**

AZN 150.5 million is expected to be provided by the State Budget for this year, and this figure is AZN 29.6 million (AZM 120.9 million) higher than the previous level. The health care share in aggregate on-budget expenditures is about 4.2%[4], compared to lower than 1.3 items (less than 5.5 percent) of expenditures in the years 2004/2005. It is noteworthy that the specific weight of the overall percentage of expenditure on the health care system in GDP is expected to be 1.1% in 2006. The amount of public health care expenditures will account for AZN 18 ($20) per capita over the same period.

Greater part of health care expenditures is allocated for hospitals. This accounts for over 69.2 percent of the overall health care spending, whereas some 18.5 percent fall to outpatient departments and clinics, 7.5 percent to other services in this sphere, 3.7 percent to applied research activities in the health care sphere, and 1.1 percent is directed towards the expenditures for the other organizational lines.

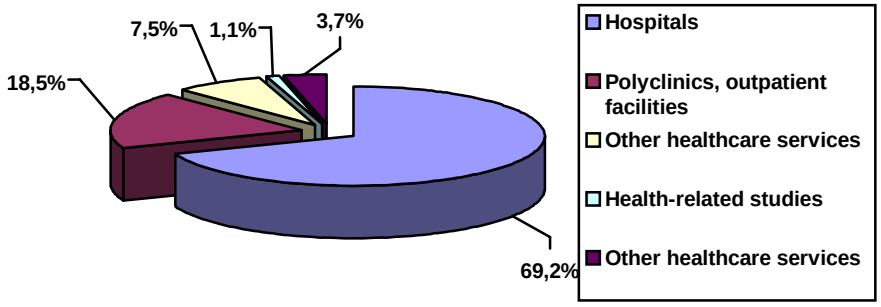


**Chart 2. The functional classification of the public healthcare spending**

Significant part of the public health care costs is directed towards remuneration of labor. For example, 61.1% (or AZN 91.9 million) of public health care expenditure financed out of the State Budget 2006 is allocated to this end. Nevertheless, average monthly wage paid to health care providers is three times as lower than the country average. For example, the average wage for the country was AZM

[3] EBRD report, 2006
[4] State Budget -2006. Package of budget documents. Ministry for Finance.

497,000 in 2004, while this figure for healthcare was AZM 148,000[5]. The insufficient wage rate in the health care sector brings to out of pocket payments.

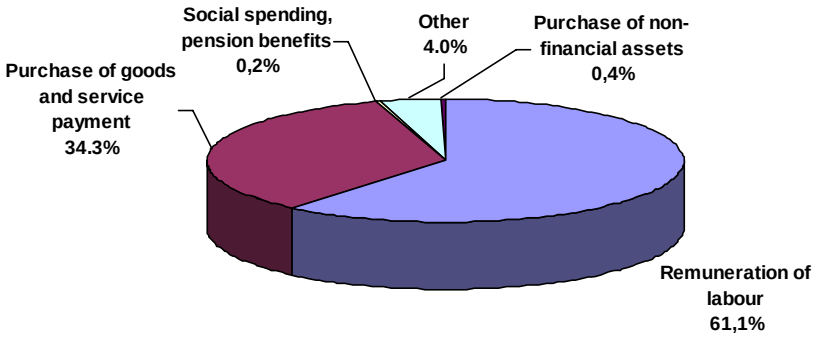


**Chart 3. The economic classification of the health care spending allocated from the State**

One-third (appr. 34.3 percent) of health care expenditures allocated from the State Budget 2006 is consumed for purchase of goods and services. The analyses showed that funds allocated for purchase of medicines and foodstuffs cover only 30-35% of payment. Since during 2004 average daily expenditures on purchase of foodstuffs per hospital bed have accounted for AzM 1,100-1,200[6]. In fact, given that the amount for average nutrition rate of a sick person is AZM 6,000-7,000, it then becomes clear that this figure is five to six times less than the minimum standard nutrition rate.

Over the recent years insignificant funds from the State Budget have been allocated for payment of repair services and construction of hospitals. If hospitals have been constructed at the expense of state budgets, such funds are not included in the "Health costs" item, but in any other item. So, it creates difficulty to fully assess the volume of funds allocated for health care growth. In reality, in "Health costs" item payment of capital repairs in buildings accounts for less than one percent of total health expenditures: however the destroyed health care facilities throughout the country, in particular in the regions, keep from providing health care services.

Currently, 20-25% of total healthcare expenses in Azerbaijan is financed out of the State Budget. According to a World Bank (WB) case-study report, insignificant part (approx. 1.8-2%) of health care expenditures is paid by foreign assistance. 75-80% of total expenditures is official or out of pocket payments from the population. By the said report, (voluntary and compulsory) insurance fees, and official payments for private medical services only account for 5% of total health costs[7]. So, 70-75% of total healthcare expenditures is effected through out of pocket payments from the population.

[5] Yearbook – 2005. SSC, statistic data.
[6] Information from the Economic Development Ministry
[7] Report on Azerbaijan's health sector. World Bank-2005

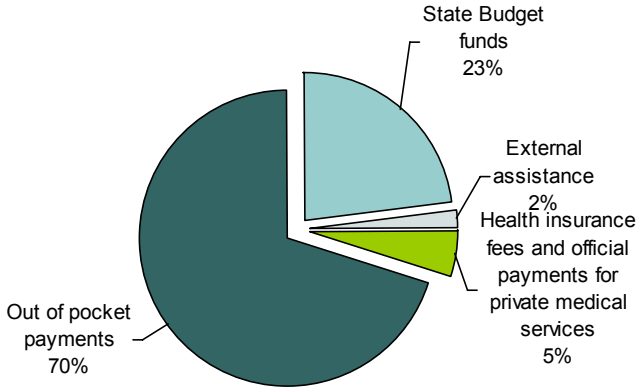


**Chart 4. The current health financing status (according to WB report)**

According to the results of the examination of households conducted by the State Statistics Committee, the monthly cash amount to health care services paid by the citizens in 2003 has totaled AZN 8.8 (US$ 9) per capita. Those (living in extreme poverty) in the first cost quintile have spent an average of AZN 4.02 (US$ 4.3), while those in the fifth quintile (the richest section) have spent AZN 15 (US$ 15.3) in that same period. The specific weight of these costs in total consuming expenditures has been higher for high quintiles (17% in the first quintile and 24% in the fifth quintile)[8].

The Main Round-up Survey carried out as part of the Health Reform Project in 10 regions of Azerbaijan (five pilot regions: Goychay, Salyan, Khachmaz, Shamkir, Sherur, and five control regions: Kurdemir, Sabirabad, Gusar, Kazakh, Babek) indicated that in case 11% and 23% of expenditures were spent on traditional treatment and purchase of drugs accordingly, 61% was attributable to the appeals to patient care and preventive treatment institutions. Therefore, part of the population uses self-treatment or does not have access to treatment at all when falling ill in order avoid health care expenditures. According to Survey results, in 2002 the specific weight of the citizens using self-treatment was 16-17%, while 24-25% did not access any treatment. The situation in rural localities is worse: the analyses showed that over the same period these figures among the rural population had been 21-22% and 26-28% accordingly[9].

So, out of pocket payments are widely spread across the country, thus restraining the opportunity of the poor section of the population to access health care services, in addition to official payments (including paid services and costs on purchase of drugs. In addition, the reduction of trust of low-income families as well as citizens that are able to pay out of their pockets in services provided forces them to use self-treatment or simply not to go to the doctor. As a result, their diseases become chronic or they have to pay much more money in the complicated phase of diseases. Such a situation results in mortality, in particular child and maternal deaths.

According to official statistic data, in 2002 the maternal deaths rate has been 19.9 (per 100,000 births)[10]. However, empiric reviews in Azerbaijan conducted by a variety of international organizations, explore great differences between their health analysis and official statistic data. Under the WB assessment, the maternal deaths rate in Azerbaijan is 4-5 times as more than the officially declared figure- in 2002 the rate level accounted for 94% (according to WB, this figure, being the third in the Region is 10 times as higher for EU average)[11]. Similar situation can be observed in statistic data on child mortality and other severe diseases. Specialists at the Ministry of Health during conversations

[8] SPPRED Secretariat. Analysis document on the healthcare sector.
[9] Review on Azerbaijan's health sector. World Bank 2005
[10] Statistical data in Azerbaijan – 2003. SSC, Yearbook.
[11] Review on Azerbaijan's health sector. World Bank (2005).

have confessed that official statistical data, to a greater extent, lead to concealment and distortion of reality, yet they do not agree with the figures declared by the international organizations, claiming that those figures have been considerably exaggerated.

**Organization and quality of primary health care (PHC) services.** Primary medical and sanitary care in the country is chiefly provided by Soviet primary health care institutions – primary health care system like feldsher and feldsher- midwife stations, outpatient centers in the rural areas, outpatient clinics and polyclinics in the regional hospitals. In 2004 there were 1,594 outpatient polyclinics in the country. These facilities could receive 105.3 thousand individuals (127.9 per 10,000 population) per one shift. According to official statistical data, the level between the very healthcare institutions with the staffing of their healthcare providers is 85-90%[12].

According to the WB report, in the regions where the bank-funded Healthcare Reform Project is implemented, 83% of outpatient feldsher stations are supplied with electric power during half of the day. Of these stations, 82% and of outpatient centers 68% have not been provided with water supply. Greater part of primary healthcare facilities in the rural and regional localities have no access to sewage system. The facilities need capital repairs or new construction. Additionally, the set of standard equipment is incomplete or needs repairs or it does not exist[13].

Only one-fifth of total healthcare expenditure is directed to PHC services. AZN 27.9 million (US$ 25.1 million) has been allocated to PHC from the State Budget-2006 and its share in total healthcare expenditure is 18.5%[14]. That means the annual amount of public healthcare costs is $3 per capita. Nevertheless, according to WHO standards, this figure must be at the rate of $15-$20 in order to provide PHC. With this amount, the normal functioning of primary healthcare facilities is certainly impossible.

Analyses indicate that public allocation to primary healthcare stations (policlinics, outpatient services, etc) does not rest in serious principles. The only expenditure item that complies with norms here is the amount of healthcare staff's wage fund. Here also the nature of healthcare facilities, confirmation of staff are based on norms and normatives developed during the Soviet period[15]. When determining other expenditures, the study and assessment of needs of separate healthcare stations is not provided, while the allocation is implemented in an empiric manner based on the principles like relevant figures in previous years, the budget's growth opportunities, private links and over-centralized planning. Staff, including chiefs of establishments and bodies of public health services are not involved in decision-making for "budget planning" which is not based on assessment of needs and serious scientific background. Only some standard paper forms are made up locally (more exactly, figures are filled in into required columns), thus being of formal nature. Then all forms are generalized in the regional finance departments which implement budget planning. In this process, oral assignments are prevalent to written instructions. And the influence -"weight"- of local administration (executive chief, head of healthcare department, etc) and relations with "the highest ranks" play a great role in determining the amount of allocations to the region's healthcare institutions and stations by the Ministry of Finance. Such informal principles are also decisive in allocating large funds for construction and repair of healthcare facilities, purchase of expensive medical equipment. On the whole, the health system in Azerbaijan continues to be characterized with specifics that were the legacy inherited by the centralized, ineffective Soviet planning system.

[12] State Statistics Committee of Azerbaijan. Environment and Health (2005).
[13] [13]Review on Azerbaijan's health sector. World Bank 2005
[14] The Law of the Azerbaijan Republic on the State Budget of the Azerbaijan Republic for 2006
[15] These normatives have been approved by the Ministry of Health of the USSR Order 999 dated 11.10.82 and it has been renewed with amendments and changes by the Ministry's Orders #16, 420 dated 10.01.1983 and 16.04.84

As part of the project, the current status and quality of providing PHC services in the Tartar region has been analyzed. The analyses showed that there are 1 regional hospital (including its policlinics), one child's hospital, four hospitals in the rural localities, 12 outpatient centers, and 21 feldsher- midwife stations[16]. A number of international development agencies, such as OGB, UNICEF, Safe Children, International Rescue Committee, etc. have taken an active part in the transformation, repair of a number of healthcare facilities, as well as building of new facilities in this region located on the front line. With financial support of these organizations, eight feldsher- midwife stations, new buildings for outpatient services have been constructed, up to 15 facilities have been reconstructed or refurbished since 1999. Over this time period, no public funds have been allocated in order to build any healthcare facility, only some of them (e.g. the central hospital, child's hospital, regional polyclinics) have been partly repaired. There is no base to provide PHC services in eight stations uncovered by the international organizations: the environment in the buildings is unfit, there is no medical equipment or it is completely old. The rest facilities (over 10) need capital repairs and renewal and completion of medical equipment.

In 2005 there was a total of 787 healthcare providers in the region, of which 140 were doctors, 373 midwives, 180 nurses, the rest (94) were other providers. Over the same timeframe, the average wage paid to the doctors in the region had totaled AZM 222, (around $49), while AZM 184,500 ($40) to midwifes and AZM 159,000 ($35) to nurses[17].

In research analyses, a catalog of issues, such as the status of providing and financing PHC in the villages across the region, the status and problems in the rural health stations, the opportunity of the residents to have access to outpatient services, etc, has been the focus of attention. The analyses of uses of budgetary funds provided to doctor's outpatient centers in the rural localities indicated that during 2005 around $12-15 per household ($2.5-3per person) have been allocated irrespective of the number of residents impacted by the services. 70-75% of these funds has been directed to remuneration of labor of the medical staff, while some 8% ($450-500 per annum) to purchase of medicines and bandages, 10% ($550-600) to purchase of inventory and equipment.

Also the analyses showed that the allocations provided to health stations in the rural areas are controlled by local representatives of the executive powers and the region's treasury departments. None of the heads of the health stations interviewed in survey had access to the information about the amount and use of funds allocated to their stations. The document reflecting calculation of costs was not filed by the health stations. Interestingly, all heads of the health stations even were unaware of availability of separate budget of expenditure. Since they were unaware of the exact/actual amount of all expenditure items (in particular medicine and bandages, equipment, inventory, stationery, payment of utilities, etc) excluding the wage fund. It paves the way for deviation and misappropriation of significant part of these funds. Various officials that are able to issue instructions and take control over these funds have been involved in this mutual intervention. In addition, the doctors of the stations are not involved in compiling the list of medicines and bandages to be purchased, and their opinion is disregarded.

During the course of study, in the village impacted by OGB-applied model "Support of community-based first health care in Azerbaijan", a survey has been applied to both model member and non-member households. At the same time, by holding similar survey in another village similar to the previous one under all conditions where the model is not applied but the traditional health care services exist, the respondents have been asked about accessibility, quality of services rendered, and the current state and work of health care stations.

[16] Information from the head of the regional healthcare department
[17] Information from the head of the regional healthcare department

The survey showed that:

- In the village covered by the model, 60% of the population was pleased with the village's outpatient services in full, 40% was pleased in part, while in the village where traditional services were provided, 5% and 26% were satisfied in full and in part respectively. 68% of respondents surveyed there is completely dissatisfied with the level of outpatient services;
- In response to the question concerning access to free drugs, 96% of model-impacted households answered "always", 4% answered "rarely", while 26% and 71% of households, which are not covered by the model, answered "always" and "rarely" respectively in the village covered by the model. In the other village, 95% of the surveyed said they never had access to drugs through outpatient services;
- 98.6% of model households go to the village outpatient department for their illness and problems, while this figure is 67% in the non-model households in the village where OGB-model is applied. In the other village, only 32% of the surveyed go to the villages outpatient center for their illness and problems, the rest 68% said they go to the regional center or other cities;
- Households covered by the model maintain they have paid no additional money to the outpatient doctor for examination and primary medical services over the last 12 months. 76% of non-model households maintained they have not paid any money to the doctor, while 22% of them said sometimes they did. In the other village, 83% of respondents said they have always paid to the doctor for examination and primary medical services, 14% said sometimes;
- Comparisons in survey in the two villages show that the inhabitants covered by the OGB model have seen the doctor much more often over this period.
- In the village covered by the model, 44.3% of community-member households, 18.9% of non-member families immediately visit the doctor for pains and illness, while this figure is 3% in the village provided by traditional services. 38.6% of community members prefer to wait for a few days after falling ill, whereas 68.9% of non-community members do so. In the other village, 95% of households surveyed prefer to wait for some time. 30% of member families and 47.3% of non-member families; 97% of residents in the second village have linked the reason for failing to visit the doctor with poorness.

The comparison of surveyed households' income over the last 12 months between OGB model and non-OGB model families shows that the majority of the respondents earn up to AZN 1,200 (AZM 6 million). The income of one-third of model families and 20% of non-model families surveyed has been around this amount. According to international standards, the income share of health care is about 12% in developing countries[18], while this figure for the developed country average is 25%[19]. By referring to the rate for the developing countries, we can see that if voluntary health insurance schemes are applied, the households can pay 12 manats (1200/12 * 0.12).

On the other side, the research activities show that primary health care costs account for 10% of total health expenditure [20]. Based on this, it is possible to determine that each family should pay 1.2 manats in order to develop a PHC model. This figure can be taken into consideration when applying community-based models. In response to the question "Regardless of your falling ill, if you are asked to regularly pay some money to be provided with the quality healthcare, how much can you spend?", most of those households interviewed pointed to AZN 1-1.2 (old 5,000/6,000 manats). Both scientific and sociological analyses show that in case such a model is applied, households can allocate at least one manat a month.

[18] William Jack, Redistributing to the sick: How should health expenditures be integrated into the tax system, Georgetown University
[19] Bill Archer, Medicare and Health Care, The USA Congressional Research Service
[20] R. Carles (2002)

**Major challenges the study has revealed.** So, according to the analyses, problems with finance mechanisms for the entire health care system and PHC are as follows:

- Problems arising from the current health care system (Soviet heritage, "tracing" system);
- Severe budget constraints (prevalent fiscal constraints);
- Poor distribution of funds in the health care system (salary, hospital-PHC balance, economic description, etc);
- Lack of relationship between financing and result. The current system has no incentives to reduce costs and to stimulate efficiency;
- Lack of sufficient money to pay to health care providers, scarcity of incentives to stimulate them;
- Higher rate of private and out of pocket payments, as well as availability of differences between solvent demand and actual demand;
- Lack of evaluation and perspective planning system for health care needs; lack of an entire health management system and insignificant number of personnel potential in this sphere;
- Lack of accountability in money flowing out, availability of mechanisms that pave the way for corruption, centralization of healthcare station administration in finance management, etc.

Analyses at outpatient clinics and feldsher stations in the rural areas have revealed the following problems:

- Poor material and technical base for the most of healthcare units and their location at premises unfit to function;
- Budget constrains in their capital repairs and the construction of new buildings during the recent years;
- Poor provision/organization of outpatient facilities with medical equipment and drugs cannot normalize the range of health services thereby providing more cost-effective diagnosis and treatment;
- Uncertainty in powers and responsibilities PHC physicians and other health providers have been delegated;
- Unavailability of information with the physicians on the amount of funds allocated to the healthcare services and where they are targeted to;
- Inaccurate completion of documents concerning illnesses and services provided to patients in health care stations;
- The people's dissatisfaction with the quality of health care services;
- Insignificant number of qualified physicians in the rural areas;
- low level of competence in primary health care professionals in the rural areas, etc.

The end-to-end solution of these problems is realistic provided that comprehensive health reform (such as structural, economic, technological, etc.) in the country is carried out and health care expenditures extremely increase (at least 8-10 times as compared to the current financial volume of health care).

# The concept to strengthen and to improve financing of PHC in Azerbaijan

The concept reflects the following:

- Determination of PHC position and role in the Azerbaijan health system and policy
- Determination of PHC services package
- PHC organization principles
- PHC financing issues
- PHC services management

## **I**. Determination of PHC position and role in the Azerbaijan health system and policy

PHC is integral part of the country's heath system. In this respect, its organization and work, as well as the level and quality of services provided to that end directly depends on achieving a transformed health system in the country.

At present one cannot say that the health sector in Azerbaijan functions as an integrated system. The Law of Azerbaijan Republic on public health (June 26,1997) fails to present a full idea about the country's health system, its institutional structure and work principles, and health-related priorities. The said law excludes a systematic approach to the position and role of PHC services, Secondary health Care and Tertiary Care, as well as their coordination. (It is of vital importance to review this law for meeting standards within healthcare reform to be implemented across the country.)

Azerbaijan's health sector is based on "Semashko" model inherited from the Soviet period. For this model based on severe centralized planning and budgetary financing, treatment, but not preventive measures is a priority. Therefore, hospitals in this model become predominant, as significant part of health care costs is targeted to maintaining hospitals, while PHC was treated as a secondary health care and financed as the principle so-called "remainder". It used to lead to increases in the number of diseases. Lack of budgetary funds over the last 10-12 years has critically aggravated the situation with PHC services, reduced the quality of services, and worsened the health condition of the population.

To ensure quality of care to the population throughout Azerbaijan and to fundamentally improve the health system here in the country, it is pressing and inevitable to conduct overall reforms in the health care sphere. These reforms shall provide for change and growth of all structural, economic and technological components under transition conditions in the effective healthcare system aimed at promoting the population access high-quality health services and comprehensively implementing the government responsibilities in the healthcare sector.

**1.** The structural reforms to be conducted in the health sector firstly encompasses system transformation and building of a National Health System in institutional and management terms. For this purpose, the current and perspective aims and commitments in the domestic healthcare system are specified, a necessary institutional structure (types and forms of services provided, types of healthcare institutions and medical centers, etc.) is identified with a goal of realizing the very commitments. At the same time, effective governance of the new system finds its solution. An exact functional division within the system is conducted to that end:

- Functions to ensure quality of care are separated and delegated to various structures as a result of development and implementation of policy environments in healthcare service delivery;
- The development and implementation of health-related policies is carried out by the Ministry for Health and Health Committees (Councils) at local level;

- General hospitals and other healthcare institutions shall function by providing quality health services within the framework of health policies implemented across the country, are burdened by powers and responsibilities under functions they will perform;
- Medium and large medical institutions management and functions of direct health services are separated. Medium and large medical institutions are delegated to health managers majored in the organization, economy, finance, and management of healthcare (for this, it is expedient to establish the Faculty of Health Economy and Management at the Azerbaijan State Medical University, to start admitting students to the Faculty, training specialists);
- To prepare, for health services, new standards and norms that meet the latest requirements;
- To strengthen professional demands in relation to medical staff, to increase their responsibility according to the examination and treatment results. All health services must be licensed. Licenses are issued by Professional Associations on appropriate health services;
- The responsibility for human health protection is delegated between the state and citizen (joint responsibility principle);
- To provide effective coordination of healthcare institutions and providers at various levels, to create their mutual cooperation and a surveillance mechanism. To apply protocols to detail examination and treatment of illnesses. The patient's access to specialized health service occurs upon the notification issued by the PHC physician;
- To introduce mechanisms for public surveillance of all healthcare institutions and healthcare costs allocated out of all sources.

**2.** Another matter at issue in the structural health reform is the transfer of health policy priority from treatment of diseases to disease prevention and early detection of common diseases, improvement of quality and easily accessible PHC potential, and **increased attention to PHC priority development and strengthening**. Experiences in the developed countries show that in most of them, significant gains in the health sector are attended by PHC system improvement. Gains in the health sector are real in case the PHC system is built properly. Therefore, health reforms in Azerbaijan are aimed to change PHC into the core ring in the health system. To strengthen PHC, a service package that anyone can access to is worked out. A transition to primary health care to the population according the family physician concept, implemented as a model, is underway.

**3.** The next issue on agenda of the structural health reform is **to design a mechanism for healthcare financing** which can provide the health system's development and quality care to the population, as well as effective use of resources. It is well known that the state budget cannot cover the healthcare costs in full, and it will continue in the nearest future as well. At present, the government finances one-fifth of total healthcare expenditure. These resources are used to maintain existing health facilities, failing to provide health growth in the country. In order to provide quality care to the population, it is important to increase the budget allocation by five times. Total healthcare expenditure per person should be $100, whereas PHC health expenditures per capita must be at least at the rate of $15-$20. To expand budget opportunities, it is reasonable to involve SOFAZ assets in the health sector. But this source is not permanent. Bottlenecks in the health system can be avoided through co-participation of the state and population in this process. Here, it is necessary to address two issues:

First, to correctly evaluate the government's financial opportunities and to provide efficient use of budgetary funds. For this purpose, it is necessary to reject the mechanism (financing of healthcare facilities for their existence and determination of costs as per bed) currently applied on healthcare costs. PHC is financed out of the budget according **to the per capita expenditure norm principle**, while at specialized health service (hospital) level, mechanisms to evaluate needs and to allocate funds under contract are applied. Additionally, **the main healthcare services package** that envisages the possibility of government financing and is appropriate for the public is worked out. The package shall specify and normalize services that are common for all sections of the population and intended for certain privilege groups.

Secondly, it is necessary to achieve that all payments (regardless of its amount) to the health services be transferred through officials channels only. The most reasonable and effective way here is to develop health insurance (both compulsory and non-statutory). Though the Law on health social insurance was adopted in 1999, there has been a lack of its development since then. In fact, as mentioned above, 70% of health expenditures in Azerbaijan is provided by the population in an unofficial manner. Clearly, unofficial payments can never secure development of the health system in accordance with modern standards. Therefore, it is necessary to run appropriate mechanisms for the development of both insurance schemes:

- To design and apply working, trustful and socially fair models for health insurance schemes (through developing appropriate laws and normative acts);
- To shape a legal base for the development health/medical insurance institutes, effective regulation of their activity and public surveillance;
- To raise public awareness;
- To provide compulsory health coverage through applying fair and incentive norms and using proper administrative instruments.

**4. To develop a new mechanism for budget forecasting** in the healthcare system is of particular importance. It is expedient to share healthcare costs financed out of the budget to certain health programs. Such programs are peculiar to budgetary regulations. The programs that specify purpose, targets, responsibilities, and forecast outcomes are issued by the Health Ministry. They may be developed according to health services, health development trends, and by the regions of Azerbaijan. During the course of preparing budgetary orders (regulations) and prognosis, low level orders are taken as a framework based on evaluation of health services and assessment of needs. Also it is essential to upgrade functional and economic structures on healthcare in order to increase effective use of budget forecasting and expenditure.

**5**. To optimize the number and structure of budgetary healthcare institutions, to provide equal conditions for all types of healthcare institutions, is the integral part of structural reforms. It is achieved by the application of **the mechanism aimed at the payment of quality health services on the contact basis** and privatization of some part of government healthcare institutions. With the extensive development under Soviet rule, a large number of healthcare buildings had been built then, most of which have become unfit, and the bed use rate is very low. But these institutions are still financed out of the state budget on a bed number basis. It, in turn, brings to ineffective use of the state funds. It is, therefore, reasonable to integrate or transform or reduce or privatize individual healthcare institutions (hospitals, polyclinics, etc) in order to increase efficiency in healthcare institutions and use of budgetary funds. As a result of the integration or reduction in the cities, the problem with lack of healthcare providers in rural localities can be solved through re-employing the reduced staff. **The private healthcare system may expand** as a result of privatization of ineffective and unpromising budgetary healthcare institutions.

**6.** To increase economic decentralization in health care institutions and responsibility for the patient's treatment must be focused by the structural reforms. All state-owned healthcare institutions (including PHC stations, outpatient facilities, polyclinics, etc) are mandated as **independent/decentralized legal entities,** their equity in accessing direct financial resources is recognized, they directly become responsible for the use of financial resources. Their budget relations are based on the contract.

**7.** Budget funds are provided to healthcare stations **under contract**. The contract is signed by representatives of Health and Finance ministries and the head of the healthcare institution. With the purpose of providing public surveillance over the use of budget funds, signing such a contract may involve leaders of local health committees (councils) or municipal officer in the area the healthcare entity is located.

**8.** Availability of adequate and precise statistical data is essential to work out effective health policies and to achieve perfect governance of the health system. Therefore, building up proper health statistics is one of the main elements of structural reform. In addition to the Statistics Committee, the role and responsibility of the Health Ministry, local executive powers, as well as local healthcare institutions and PHC is increased in the collection of statistic data.

The other issues on improving PHC strengthening and financing are settled within the said principles and directions of health reforms.

## II. Definition of PHC services package

In reality, a good PHC system should not be understood as top quality outpatient services to population. A good PHC system means a comprehensive package of financially effective prophylactic and medical services. Establishment/definition of this package remains on agenda. Azerbaijan's Law on public health does not enable us to clarify this matter. But the following components have been included in Alma-Ata Declaration[21] adopted at the International Conference on Primary Health Care held in Alma-Ata, USSR, in September 1978:

- education for the community on the health problems prevalent and on methods of preventing health problems from arising or of controlling them;
- the promotion of proper nutrition, safe water, and basic sanitation;
- maternal and child health care, including family planning ;
- immunization against major infectious diseases;
- the prevention and control of local endemic diseases;
- appropriate treatment of common diseases and traumas;
- provision of essential drugs;

According to WHO concept, PHC lays emphasis on a patient's health promotion, disease prevention, adaptation of the technologies to help people maintain their habitual lifestyle in their habitual environment as long as possible, and integration of all aspects of PHC.

It is expedient that the PCH system in Azerbaijan be organized on this WHO concept. At the same time, collection of statistics on public health can be added to these activities.

## III. PCH principles

Primary health care to the population according the family physician concept is implemented as a model. It is a family physician who acts as a link in rendering health care to the population. He is expected not only to render health care to a patient but also to assess the patient's personality and

[21] Report on the International Conference on Primary Health Care, Alma-Ata, USSR, September 6-12, 1978; WHO, Geneva, 1978.

mental health. The latter is related to the problems of not medical nature only: that is largely related to housing, family's lifestyle, its well-being and so forth.

The family physician's main responsibilities embrace rendering primary health care to all family members, namely:

- prevention and early detection of common diseases in adults and children;
- observation of the patient's health status in dynamics and carrying out measures aimed at improvement of the patient's health;
- rendering the necessary health care in case of emergency and acute diseases;
- carrying out scheduled therapeutic and rehabilitation activities within the his professional expertise;
- identification of indications for the patient's referral to specialists; timely hospitalization of patients;
- carrying out an examination to confirm temporary disablement;
- counseling on issues of family planning, ethics, psychology of family relationships, hygiene, social, medical, and sexual aspects of family life, as well as issues of feeding, upbringing of children, career counseling for adolescents and so forth.

Most of the FSU countries (Ukraine, Turkmenistan, Georgia, Russia, etc) have decided to reform their primary health care to the population according the family physician concept as a model.

The family physician concept is not new to our country at all. So the Chair of Family Medicine at the Azerbaijan State Medical University and the Chair of Family Physician at the Doctors' Qualification Institute have been given functions of research and training centers on family medicine issues since 2002. A program on family physician has been worked out, training and qualification courses have been launched. Nevertheless, it is necessary to elaborate a unique national concept to broadly apply "family physician".

It is possible to spread the practice through conducting training courses on family physician to field physicians employed by rural out-patient departments and urban clinics.

In addition to the application of the family physician concept, PHC composition calls for compliance with the following principles:

- free access and easily obtained first contact
- professionalism
- sustainability
- appropriate financing, little expenditure, efficiency
- inter-sector collaboration, coordination
- social fair (that meets the interests of all social sections, complies with the elimination of structural gender inequality)
- appropriate supply and technologies
- provision of essential drugs
- material incentives and responsibility (confidence, professionalism)
- participation (public involvement)
- transparency, accountability, and public scrutiny

In addition, good PHC is conditioned by the location of the medical institution in a standard environment (water, electric, heat supply, etc).

## IV. PHC financing issues

Good management of PHC in the country needs a large amount of financial resources. According to WHO standards, PHC health expenditures per capita must be at least at the rate of $15-$20. The volume of per capita PHC expenditure allocated from the State Budget is 5-6 times lower than this standard. Of particular note is that it is necessary to change the government's ongoing financing system with a view to increasing budget expenditures for PHC. With changing PHC into a core ring in the entire health system, the existing expenditure distribution ratio between hospitals and PHC will gradually change in the favor of the latter. Thanks to this, it is possible to increase by three times the amount of budget expenditures for PHC over the next few years.

Allocations to PHC institutions from public funds are realized on the basis of per capita expenditure normative and evaluation of needs. The healthcare institutions are directly involved in the assessment of needs and preparation of budgetary executions. Budget expenditures are allocated to PHC institutions under contract (parties to the contract have been mentioned above). The financial autonomy of medical entities is provided: their bank accounts are opened and funds are directly transferred to their accounts through treasury. Expenditures are shared in accordance with the budget order. Funds intended for medicines are directed to purchase them for a certain period by the decision of the Health Councils through taking into consideration of the physicians' opinion.

The role of municipalities in meeting PHC financial needs is increased. Municipalities are charged to improve conditions in the buildings of healthcare institutions.

The public scrutiny over financial activity of healthcare institutions is implemented by the Health Councils.

**Public participation in PHC financing.** Regardless mobilization of all opportunities, it will be a challenge to properly finance PHC out of budget allocations over few years to come. And this may lead to further availability of problems in providing PHC material and technical base and increasing the quality of services. Therefore, to solve certain problems in this sphere, public involvement in financing is provided before the State Budget opportunity is expanded and a large amount of PHC allocations is provided by the budget.

PHC is not merely the professional delivery of medical care at local level. Involvement means that individuals and families assume responsibility for their, and the community's health and welfare and develop the capacity to contribute to their own and the community's development. The WHO concept of PHC assumes that investment in this process of PHC is more efficient, effective, acceptable and sustainable than other ways of promoting health gain within local communities[22].

In this regard, it is appropriate to benefit from OGB model "Community-based primary health care support" and to use other community-based models. To that end, a special "Health Fund" is established and its funds are collected in a special account with the bank. Membership fees are transferred once a month by families that access services of the healthcare institution. In specific cases, an exemption system for vulnerable individuals may be applied. Public control over health care expenditure is provided. The Fund is governed by local Health Councils under specific instructions. The Health Council issues a quarterly report to the public on the volume and use of resources collected in the Fund. The establishment of such fund is an effective means in providing public control over

[22] Terminology for the WHO Conference on European Health Care Reforms. WHO, Regional Office for Europe. Copenhagen, 1996

health costs. The Fund's resources are chiefly targeted to the provision of the material and technical base (housing conditions, medical equipment, laboratory appliances, etc) and medicine purchase. As it is virtually a non-compulsory health insurance class, it may function as a Health Insurance Fund (if necessary). For public accessibility, all decisions on the use of funds are placed on special stands in medical posts or municipality localities. Health Councils also act as linking bodies on use of budget and Fund resources according to needs.

The public role in co-financing will include:

- fee-for-service and participation in setting salaries for doctors and the medical staff;
- establishment of drug funds;
- raising capital funds;
- development of an exemption system for vulnerable individuals.

Currently, public involvement in co-financing is rather problematic, as the majority of people are low-income. Therefore, collection of resources to the Health Fund must tally with interests and opportunities of all sections of the local population. In fact, the fee must be of a symbolic nature, and should not create problems for family budgets.

By the survey conducted among households in rural localities, each family can transfer AZN 1 to the Fund. This fact is confirmed by the response to the question on the questionnaire "Regardless of your falling ill, if you are asked to regularly pay some money to be provided with the quality healthcare, how much can you spend?", to which most of those households interviewed pointed to AZN 1-1.2.

If a family transfers to he Fund one manat a month, then a village with 400 households can gain over $5,000 within a year which is equal to expenditure cost for such a village. With this amount, it is real to improve the material and technical base of PCH or to take other measures for stimulation of medical staff to provide effective services.

It is possible to quit public involvement in PCH financing once the State Budget has broadened opportunities. Public scrutiny institutions that will have been effective by that time will be able to continue activity at the expense of experiences gained.

## B. PHC management

Community involvement is supported by the establishment of the following structures:

Health Councils in every village, Health Committees in every Health Center catchment area (typically several villages), and District Health Advisory Boards.

The Health Councils consisting of nine or ten members are selected for a one-year period at a general meeting of people living in the same municipal locality.

The Council includes representatives from the medical entity, municipal council, rural executive office. Additionally, influential individuals, old-aged men, women, and young people are also involved in the process. The said Council quarterly reports at the general community meeting regarding its activity, health expenditures, and the flow of the money in the Health Fund. The general meeting also discusses health-related problems in the village, provides speeches in order to raise health awareness.

The health committees at the health centers include one or two representatives of each village in its catchment area. Both of these structures will act as linking bodies between the local population and health units and support joint-management and provision of transparency in health expenditures.